Section of Ophthalmology.

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Tay's "Guttate Choroiditis."

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THE first mention of this condition was by Jonathan Hutchinson in 1876, in the Royal London Ophthalmic Hospital Reports, viii, 231. The heading of the paper is: "Symmetrical Central Choroido-Retinal Disease in Senile Persons." Ten cases are cited, but there is no picture. In all, the guttate appearance of the choroid was associated either with marked changes in the choroid or retina, or with cataract. The ages ranged from 38 to 74, and vision was poor in all.

Hutchinson thought that the condition was a form of what he called "senile amaurosis." He gives Warren Tay the credit for discovering this peculiar form of spotty choroid. In reading through the description of these ten cases there is nothing to controvert the theory that, anyhow, in some of them, this spotty appearance was an accidental association.

- (1) The first typical case reported was by Nettleship in 1884, Trans. Ophth. Soc., vol. iv, 164, and was accompanied by a picture which I show now. Both the description and the picture tally somewhat with what we understand as Tay's "guttate choroiditis," but Nettleship does not mention Tay, nor does he give any suggestion as to the probable cause of the condition. He simply states that there was no choroidal disease elsewhere, and that vision was normal. Note that the spots are more or less defined.
- (2) In 1892 Mr. Henry Juler reported a much more typical case, Trans. Ophth. Soc., xiii, 143. Here, again, the condition is not labelled as Tay's, but the author makes the significant remark, "I consider this a variation of the normal choroid, and not due to any plastic exudation in the choroid." In the illustration which I show the spots are seen to be faint and not defined.

Three years ago, at the meeting of the Ophthalmological Society, Mr. R. C. Davenport opened a discussion on Tay's choroiditis and allied conditions (*Trans. Ophthal. Soc.*, 1929, xlix, 110) and he rightly drew attention to the loose way Tay's "guttate choroiditis" has been mixed up with other changes in the choroid.

He suggests a classification of cases allied to Tay's "guttate choroiditis" as follows:—

- (i) Colloid body formation.
 - (a) Juvenile or possibly congenital.
 - (b) Senile or at least first seen in old people.
 - (c) Associated with gross fundus changes.
- (ii) Conditions simulating colloid body formation in the clinical picture.

He concludes by saying he would keep the name of Tay only for (i) with unimpaired vision.

One fact I think is quite clear, that typical Tay's guttate choroiditis is always associated with normal—and even supernormal—vision and for this reason a genuine case has never yet been examined by a pathologist. Cases that have been reported in which there were hyaline or colloid bodies, sometimes pushing into the retina and damaging the rods and cones, should not be labelled Tay's. Neither would I class Doyne's cases of familial guttate choroiditis as Tay's.

I go a little further than Mr. Davenport. Mr. Henry Juler said he thought the condition was a variation of the normal choroid, and I agree with him and suggest that it is probably always congenital, and possibly due to some error in development. This opinion has been specially forced on me lately by a case, a picture of which I show you now. (See Plate.)

(3) A lady who looked 28, but was ten years older, was sent to me to have her refraction examined, with a view to ascertain whether the migraine from which she suffered was due to eyestrain. Vision, with correction, was $\frac{6}{5}$ in both eyes; under homatropine I found a small amount of myopia with astigmatism and slight anisometropia, and the correction in a short time removed the migraine, from which she had suffered for years, and the cure of which she described as a miracle.

On examining the fundi with the ophthalmoscope I found, to my surprise, in the right eye, spots, yellowish-pink in colour, scattered all over the fundus; at the periphery some were very large and all were ill-defined. The macula had not escaped but the spots here were much smaller.

Now it is interesting to note that the left eye gave a picture of a typical Tay's

choroiditis, like No. 7; the spots were very faint and small.

In the typical cases that I have watched for years I have always found the condition stationary, vision remaining good.

(4) Is a case of Sir William Lister's, the condition resembling my case No. 3, but the large spots more irregular. In this case also vision was normal.

(5) Is a similar case of Mr. Cardell's, in a patient aged 49, the vision in both eyes was $\frac{6}{6}$. The spots were ill-defined, but very numerous.

(6) Is a case of mine watched for twenty-five years. Vision $= \frac{6}{5}$, with correction in both eyes.

(7) Is a typical picture and resembles Juler's (No. 2).

But for the habit we all have of examining every eye with the ophthalmoscope, these cases could be easily missed; in fact, unless the eye is examined by the direct method, probably many have been missed.

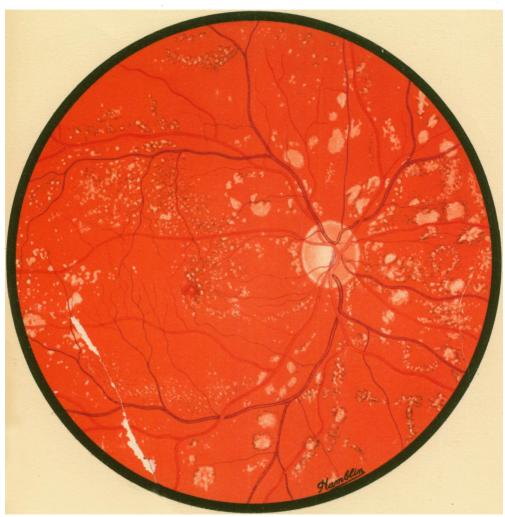
This condition was probably discovered by Tay because he was such a careful examiner, and always used the *direct* method with the ophthalmoscope. I was his clinical assistant at the time at the old Moorfields Hospital; (I am speaking of fifty years ago). Many observers were still using indirect ophthalmoscopy; indeed the late Dr. Batten informed me that Sir William Gowers invariably used it for his illustrations for his book on "Medical Ophthalmoscopy."

Who began calling this fundus picture "guttate choroiditis"? The name appears to have come about gradually.

I feel strongly that we ought to keep Tay's name associated solely with the typical form to which I have referred, and not with every spotty state of the choroid.

It would be interesting to know if there is any developmental condition which might cause these spots.

Of one thing we can be sure, it is *not* a choroiditis; if we intend to retain the name "guttate choroiditis," it should be placed in inverted commas.



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Rare form of Tay's "Guttate Choroiditis."

Note that the spots are all ill-defined, are not raised, and, especially at the periphery, are of an unusual size.